

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of performing a continuity check operation comprising:
 sending a sequence of cells, each cell having a specified pattern of bits, over a packet network connection through a first interface on a the packet network to a second interface on the packet network wherein the pattern of bits is generated by a narrowband-to-packet network adapter having a bit pattern generator;
 monitoring the first interface for a return sequence of cells ~~of the pattern of bits~~ over the packet network connection; and
 deciding whether the continuity check is successful based on whether ~~the~~ a pattern of bits of the return sequence of cells matches the specified pattern of bits of the sent sequence of cells ~~is detected at the first interface during the monitoring~~.
2. (Original) The method of claim 1 including providing a loop between incoming and outgoing packet streams associated with the packet network connection.
3. (Currently Amended) The method of claim 1 including repeatedly sending the sequence of cells ~~pattern of bits~~ over the packet network connection during the monitoring.
4. (Currently Amended) A method of performing a continuity check operation comprising:

sending a sequence of cells, each cell having a specified pattern of bits, over a packet network connection through a first interface on a the packet network to a second interface on the packet network;

monitoring the first interface for a return sequence of cells of the pattern of bits over the packet network connection; and

deciding whether the continuity check is successful based on whether ~~the~~ a pattern of bits of the return sequence of cells matches the specified pattern of bits in the sent sequence of cells ~~is detected at the first interface during the monitoring~~,

wherein the continuity check is performed during a set-up process for a narrowband call over the packet network.

5. (Original) The method of claim 4 wherein the call set-up process includes sending Signaling System 7 messages.

6. (Currently Amended) The method of claim 1 wherein the ~~pattern of bits~~ sequence of cells sent over the packet network connection includes a first byte all of whose bits are a first value and a second byte all of whose bits are a second different value.

7. (Currently Amended) The method of claim 1 wherein the ~~pattern of bits~~ sequence of cells includes multiple bytes each having multiple bits, wherein a single bit in each byte has a value that differs from all other bits in the byte, and wherein the bit having the different value is shifted by one position between adjacent bytes.

8. (Currently Amended) The method of claim 1 wherein the ~~pattern of bits~~ sequence of cells includes first and second bytes each of whose bits alternate in value, and wherein the value of the second byte is the complement of the value of the first byte.

9. (Currently Amended) The method of claim 1 wherein the continuity check is considered a failure if the ~~pattern of bits~~ return sequence of cells is not detected at the first interface during monitoring within a specified period.

10. (Currently Amended) An apparatus configured to adapt circuit-switched and packet-based bearers and configured to execute continuity check operations, the apparatus comprising a bit pattern generator and a bit pattern detector, wherein the pattern of bits is generated by a narrowband-to-packet network adapter having a bit pattern generator, wherein the pattern generator is arranged to generate a sequence of cells, each cell having a specified pattern of bits to be sent over a packet network connection, and the bit pattern detector is arranged to monitor a return sequence of cells ~~of the pattern of bits~~ over the packet network connection, wherein the apparatus is configured to decide whether a continuity check is successful based on whether a pattern of bits of the return sequence of cells matches the specified pattern of bits in the sent sequence of cells ~~the generated pattern of bits is detected by the bit pattern detector~~.

11. (Currently Amended) The apparatus of claim 10 wherein the bit pattern generator is arranged to send the sequence of cells ~~pattern of bits~~ repeatedly over the packet network connection.

12. (Original) The apparatus of claim 10 configured to perform the continuity check during a set-up process for a narrowband call over the packet network connection.

13. (Currently Amended) A communications system comprising:

a packet network; and

a first gateway to adapt a narrowband to a the packet network coupled to a first interface on the packet network and configured to execute continuity check operations, wherein the gateway includes a bit pattern generator and a bit pattern detector, wherein the pattern generator is arranged to generate a sequence of cells, each cell having a specified pattern of bits to be sent

over a connection in the packet network, and the bit pattern detector is arranged to monitor a return sequence of cells ~~of the pattern of bits~~ over the packet network connection, wherein the gateway is further configured to decide whether a continuity check is successful based on whether a pattern of bits of the return sequence of cells matches the specified pattern of bits in the sent sequence of cells ~~the generated pattern of bits is detected by the bit pattern detector~~.

14. (Original) The system of claim 13 including a second gateway coupled to a second interface on the packet network and configured to provide a loop between incoming and outgoing packet streams associated with the packet network connection.

15. (Currently Amended) The system of claim 13 wherein the bit pattern generator is arranged to send the sequence of cells ~~pattern of bits~~ repeatedly over the packet network connection.

16. (Currently Amended) A communications system comprising:
a packet network; and
a first gateway coupled to a first interface on the packet network and configured to execute continuity check operations, wherein the gateway includes a bit pattern generator and a bit pattern detector, wherein the pattern generator is arranged to generate a sequence of cells, each cell having a specified pattern of bits to be sent over a connection in the packet network, and the bit pattern detector is arranged to monitor a return sequence of cells ~~of the pattern of bits~~ over the packet network connection, wherein the gateway is further configured to decide whether a continuity check is successful based on whether a pattern of bits of the return sequence of cells matches the specified pattern of bits in the sent sequence of cells ~~the generated pattern of bits is detected by the bit pattern detector~~,
wherein the gateway is configured to perform the continuity check during a set-up process for a narrowband call over the packet network connection.

17. – 19. (Canceled)

20. (Currently Amended) An article comprising a computer-readable storage medium including computer-executable instructions for causing a computer system to:

send a sequence of cells, each cell having a pattern of bits, over a packet network connection through a first interface on a packet network to a second interface on the packet network;

monitor the first interface for a return sequence of cells ~~of the pattern of bits~~ over the packet network connection;

decide whether a continuity check is successful based on whether a pattern of bits of the return sequence of cells matches the specified pattern of bits in the sent sequence of cells ~~the pattern of bits is detected at the first interface during the monitoring~~; and

perform the continuity check during a set-up process for a narrowband call over a packet network.

21. (New) A method of performing a continuity check between a first gateway and a second gateway of a packet-switched network, the method comprising:

generating a sequence of cells in a pattern generator of the first gateway, each cell having a specified bit pattern,

transmitting the sequence of cells from the first gateway to the second gateway;

establishing a continuity check loop for the transmitted sequence of cells at the second gateway;

using a pattern detector at the first gateway to monitor for a returned sequence of cells from the second gateway; and

determining whether the returned sequence of cells matches the transmitted sequence of cells.